PENNSYLVANIA GEOMETRY · UNIT 4 · 10 QUESTIONS

Data Analysis and Probability — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A coin is tossed and a die is rolled. The probability of heads and a 6 is**

- **A** $\frac{1}{6}$
- **B** $\frac{1}{2}$
- **C** $\frac{1}{12}$
- **D** $\frac{1}{3}$

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2 **A bag has 5 red balls and 5 blue balls. Two balls are drawn without replacement. The probability both are blue, to two decimal places, is about**

- A 0.25
- B 0.22
- C 0.5
- D 0.2

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3 **The probability of an event is 0.85. The probability the event does not happen is**

- A 0.85
- B 1.15
- C 0.15
- D 0.015

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4 **In a survey of 40 students, 14 like both sports and music, 6 like sports only, 12 like music only, and 8 like neither. The probability a randomly chosen student likes music is**

- A 0.65
- B 0.35
- C 0.5
- D 0.2

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5 **Using the same survey, the probability a student likes sports, given that the student likes music, to two decimal places, is about**

- A 0.35
- B 0.65
- C 0.54
- D 0.7

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6 **A line of best fit is y = -3x + 20. The predicted value of y when x = 5 is**

- A 35
- B 5
- C -5
- D 15

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7 **For a data point, the actual value is 18 and the predicted value is 20. The residual is**

- A 2
- B 38
- C -2
- D 0

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8 **A correlation coefficient of r = -0.88 indicates a**

- A strong positive correlation
- B weak negative correlation
- C no correlation
- D strong negative correlation

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9 **Heights are normally distributed with mean 50 and standard deviation 10. About what percent of values are between 30 and 70?**

- A 68%
- B 95%
- C 99.7%
- D 50%

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10 **The data are 10, 20, 30, and 40. The mean is _____**

ANSWER _____

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ANSWER KEY

1. C
2. B
3. C
4. A
5. C
6. B
7. C
8. D
9. B
10. 25

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